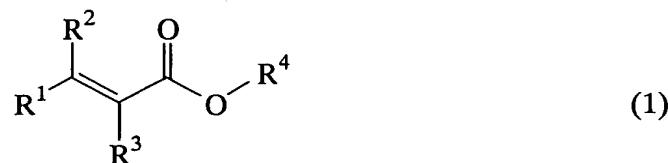


CLAIMS:

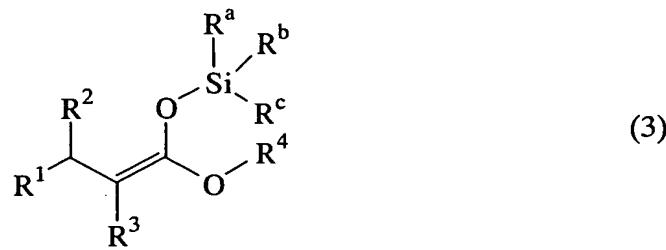
1. A process for preparing a silyl ketene acetal of the general formula (3), comprising the step of reacting an
5 α,β -unsaturated carboxylic ester of the general formula (1) with a hydrosilane or hydrosiloxane of the general formula (2) in the presence of a catalytic amount of tris(pentafluorophenyl)borane,



10 wherein R¹, R² and R³ are each independently hydrogen or a substituted or unsubstituted monovalent hydrocarbon group of 1 to 60 carbon atoms, or a pair of R¹ and R² or R¹ and R³ may bond together to form a ring of 3 to 20 carbon atoms with the carbon atom(s) to which they are attached, and R⁴ is a
15 substituted or unsubstituted monovalent hydrocarbon group of 1 to 40 carbon atoms or a substituted or unsubstituted silyl group of up to 60 carbon atoms and free of a SiH bond,



20 wherein R^a, R^b and R^c are independently selected from a substituted or unsubstituted monovalent hydrocarbon group of 1 to 20 carbon atoms, an organoxy group of 1 to 20 carbon atoms, an organo(poly)siloxy group of 1 to 1,000 silicon atoms, and a halogen atom, or a pair of R^a and R^b, R^a and R^c, or R^b and R^c may bond together to form a siloxane ring of 3
25 to 50 silicon atoms or a silicon-containing ring of 1 to 20 carbon atoms with the silicon atom to which they are attached, or R^a, R^b and R^c may bond together to form a cage siloxane of 6 to 50 silicon atoms with the silicon atom to which they are attached,

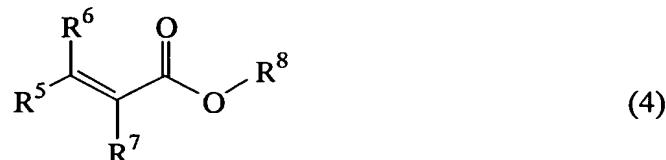


wherein R^1 , R^2 , R^3 , R^4 , R^a , R^b and R^c are as defined in formulae (1) and (2).

5 2. The process of claim 1, wherein the α,β -unsaturated carboxylic ester of formula (1) is added to a reactor charged with a mixture of the hydrosilane or hydrosiloxane of formula (2) and a catalytic amount of tris(pentafluorophenyl)borane.

10 3. The process of claim 1, wherein to a reactor charged with a catalytic amount of tris(pentafluorophenyl)borane, the α,β -unsaturated carboxylic ester of formula (1) and the hydrosilane or hydrosiloxane of formula (2) are added in controlled amounts so as to provide 0.9 to 1.1 moles of Si-H bonds on the compound of formula (2) per mole of the compound of formula (1).

15 4. A process for preparing a disilyl ketene acetal of the general formula (5), comprising the step of reacting an α,β -unsaturated carboxylic ester of the general formula (4) with a hydrosilane or hydrosiloxane of the general formula (2) in the presence of a catalytic amount of tris(pentafluorophenyl)borane,



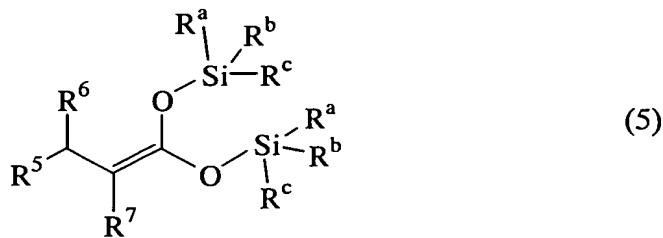
25 wherein R^5 , R^6 and R^7 are each independently hydrogen or a substituted or unsubstituted monovalent hydrocarbon group of 1 to 60 carbon atoms, or a pair of R^5 and R^6 or R^5 and R^7 may

bond together to form a ring of 3 to 20 carbon atoms with the carbon atom(s) to which they are attached, and R⁸ is a substituted or unsubstituted monovalent hydrocarbon group of 1 to 40 carbon atoms,



5

wherein R^a, R^b and R^c are independently selected from a substituted or unsubstituted monovalent hydrocarbon group of 1 to 20 carbon atoms, an organoxy group of 1 to 20 carbon atoms, an organo(poly)siloxy group of 1 to 1,000 silicon atoms, and a halogen atom, or a pair of R^a and R^b, R^a and R^c, or R^b and R^c may bond together to form a siloxane ring of 3 to 50 silicon atoms or a silicon-containing ring of 1 to 20 carbon atoms with the silicon atom to which they are attached, or R^a, R^b and R^c may bond together to form a cage siloxane of 6 to 50 silicon atoms with the silicon atom to which they are attached,

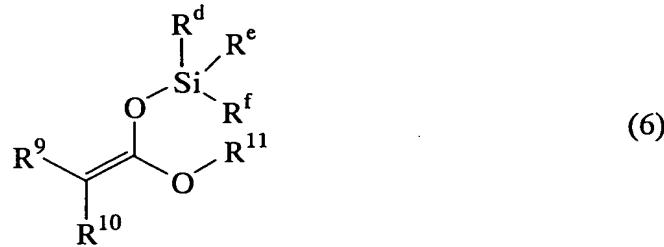


wherein R⁵, R⁶, R⁷, R^a, R^b and R^c are as defined in formulae (4) and (2).

20

5. The process of claim 4, wherein to a reactor charged with a mixture of the hydrosilane or hydrosiloxane of formula (2) and a catalytic amount of tris(pentafluorophenyl)borane, the α,β -unsaturated carboxylic ester of formula (4) is added in an amount of up to 0.5 mole per mole of Si-H bonds on the compound of formula (2).

6. A process for preparing a disilyl ketene acetal of the general formula (7), comprising the step of reacting a silyl ketene acetal of the general formula (6) with a hydrosilane or hydrosiloxane of the general formula (2) in the presence 5 of a catalytic amount of tris(pentafluorophenyl)borane,

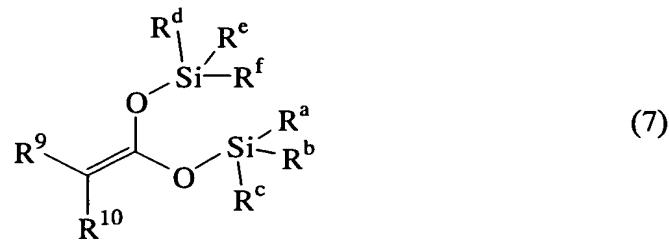


wherein R⁹ and R¹⁰ are each independently hydrogen or a substituted or unsubstituted monovalent hydrocarbon group of 1 to 60 carbon atoms, or a pair of R⁹ and R¹⁰ may bond 10 together to form a ring of 3 to 20 carbon atoms with the carbon atom to which they are attached, R¹¹ is a substituted or unsubstituted monovalent hydrocarbon group of 1 to 40 carbon atoms, R^d, R^e and R^f are independently selected from a substituted or unsubstituted monovalent hydrocarbon group of 15 1 to 20 carbon atoms, an organoxy group of 1 to 20 carbon atoms, an organo(poly)siloxy group of 1 to 1,000 silicon atoms, and a halogen atom, or a pair of R^d and R^e, R^d and R^f, or R^e and R^f may bond together to form a siloxane ring of 3 to 50 silicon atoms or a silicon-containing ring of 1 to 20 20 carbon atoms with the silicon atom to which they are attached, or R^d, R^e and R^f may bond together to form a cage siloxane of 6 to 50 silicon atoms with the silicon atom to which they are attached,



25 wherein R^a, R^b and R^c are independently selected from a substituted or unsubstituted monovalent hydrocarbon group of 1 to 20 carbon atoms, an organoxy group of 1 to 20 carbon atoms, an organo(poly)siloxy group of 1 to 1,000 silicon

atoms, and a halogen atom, or a pair of R^a and R^b , R^a and R^c , or R^b and R^c may bond together to form a siloxane ring of 3 to 50 silicon atoms or a silicon-containing ring of 1 to 20 carbon atoms with the silicon atom to which they are attached,
5 or R^a , R^b and R^c may bond together to form a cage siloxane of 6 to 50 silicon atoms with the silicon atom to which they are attached,



wherein R^9 , R^{10} , R^a , R^b , R^c , R^d , R^e and R^f are as defined in
10 formulae (6) and (2).